Arkema will present a technical paper about “Barrier film of improved efficiency for soil fumigation” at the 7th AMI international conference about Agricultural Films in September 2014.

Arkema, a global chemical producer, has developed a new and effective soil fumigant marketed under trade names Paladin® and Accolade®. The dimethyl disulfide (DMDS) based technology is a pre-plant soil fumigant which is very effective against parasitic nematodes, soil-borne plant pathogens and weeds.

Soil fumigant efficacy is maximized by using a gas barrier film that is highly impermeable to DMDS. Arkema has developed, and industrially produced, an LDPE based multilayer gas barrier film using a high performance tie layer, Orevac®, and gas barrier resin, Evasin® EVOH. The films barrier properties to DMDS have been evaluated in multiple humidity and temperature conditions according to the French norm NF T54-195-2. The gas permeability for this film have been compared against the industry standard polyamide-based films to understand the relative performance for this new technology.

In conjunction with lab investigations, open field evaluations have demonstrated that DMDS when used in conjunction with EVOH-based barrier films provide for the control of the target nematodes, soil borne diseases and weeds, while minimizing the amount of DMDS released to atmosphere. The low thickness of the barrier layer (EVOH) makes the film more easily recyclable. Therefore Arkema offers the agricultural sector one complete solution for soil fumigation including product and film.

The conference will take place in Barcelona, from September 15 to September 17. The paper will be presented by Richard Rebizak, Films technical development manager, based at the Arkema Cerdato Research and Development center in France.

EVOH is a specialty copolymer with very high barrier properties to gas (oxygen, carbon dioxide), aromatics and hydrocarbons. These characteristics, together with excellent transparency and good processability, have made this the reference product among barrier polymers, in particular for multilayer food packaging, automotive fuel tank and heating pipe markets.

Since 2009, Arkema is the exclusive distributor for Evasin® EVOH in Europe and has become the only resin supplier able to offer both Orevac® tie layer and Evasin® EVOH barrier material. Arkema is now able to offer full solutions to all of its customers producing multilayer barrier films.
For more information about Orevac® tie layer, Evasin® 4405F, 4451F and other grades, please visit Orevac and Evasin web pages.

Evasin® is a trade name registered by Chan Chung Petrochemicals Co.Ltd. Chang Chun Petrochemicals Co.Ltd is one of the largest Taiwanese chemicals manufacturer with a strong activity in intermediates, epoxys, aromatics, and particularly Vinyl Acetate (VAM), Polyvinyl Alcohol (PVA), and Ethylene - Vinyl Alcohol (EVOH) copolymers.

A global chemical company and France’s leading chemicals producer, Arkema is building the future of the chemical industry every day. Deploying a responsible, innovation-based approach, we produce state-of-the-art specialty chemicals that provide customers with practical solutions to such challenges as climate change, access to drinking water, the future of energy, fossil fuel preservation and the need for lighter materials. With operations in more than 40 countries, some 14,000 employees and 10 research centers, Arkema generates annual revenue of €6.1 billion, and holds leadership positions in all its markets with a portfolio of internationally recognized brands.

Contacts
Press - Sybille Chaix Tel.: +33 1 49 00 70 30 sybille.chaix@arkema.com
Orevac & Evasin – Richard Perrinaud Tel.: +33 1 49 00 74 00 richard.perrinaud@arkema.com
DMDS fumigation – Thierry Fouillet Tel.: +33 5 59 92 67 26 thierry.fouillet@arkema.com